

Commonwealth of Massachusetts Division of Fisheries & Wildlife Route 135 Westborough, MA 01581 (508) 792-7270

THREATENED SPECIES OF MASSACHUSETTS

GREAT BLUE LOBELIA

(Lobelia siphilitica L.)

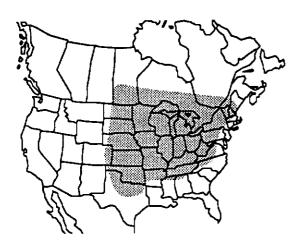
Description

Great blue lobelia—a member of the Bluebell family (Campanulaceae)—is a 2 - 15 dm (about 1 to 5 ft.) high, perennial with bright blue or violet flowers in the axils of leafy bracts. The specific epithet (siphilitica) refers to a former belief in the plant's medicinal properties. Great blue lobelia's inch-long, stalked flowers are arranged in an elongated cluster on an unbranched, stem, a type of inflorescence called a raceme. The thin leaves are alternate, finely toothed, and 8 - 12 cm (about 3 - 5 in.) long; they are sessile (stalkless) and taper at both ends. Great blue lobelia flowers in September. Its fruit is a capsule (a many-seeded fruit formed from a compound pistil).

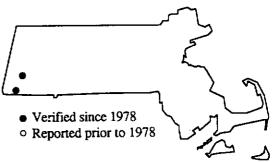
Range

The documented range of great blue lobelia extends from Maine to Manitoba and Colorado, south to North Carolina and Texas.





Documented Range of Great Blue Lobelia



Massachusetts Distribution by Town

Similar Species

This species is very distinct. Late in the season, no other blue-violet flowering plants can be found in its habitat.

Habitat

In general, great blue lobelia grows in swamps and areas with wet ground, in both semi-dense shade and in the open. It prefers the wet soil of rich low woods, stream banks, roadsides, meadows and open peaty wetlands with cold, alkaline groundwater that seeps or flows from a calcareous mineral substrate. It is usually found growing in limy soil. Specific habitats in Massachusetts include a moist roadside ditch, the edge of a pastured fen, an open hillside seepy pasture, seasonally moist woods and a forested, dolomitic limestone cobble. Associated plant species include Kalm's or brook lobelia (Lobelia kalmii), American grass-of-Parnassus (Parnassia glauca), bog goldenrod (Solidago purshii) and black bulrush (Scirpus atrovirens). (Like great blue lobelia, American grass-of-Parnassus, Kalm's lobelia and bog goldenrod prefer limy areas.)

Population Status

Individuals of all species listed in Massachusetts are protected from take (picking, collecting, killing...) and sale under the Massachusetts Endangered Species Act. Great blue lobelia is presently listed as "Threatened" in Massachusetts, where there are five current stations (discovered or relocated since 1978) in two towns. Reasons for its rarity here include the scarcity of its habitat and the fact that Massachusetts is at the northeastern edge of its range. Great blue lobelia is uncommon throughout New England.

Management Recommendations

As with most rare species, little is known about great blue lobelia's exact habitat needs. The following comments are based primarily on observations of the various populations in Massachusetts. Although great blue lobelia does grow in wooded areas, it does not grow in dense shade. Therefore, opening of forest canopies should be encouraged in the immediate vicinity of the plant's populations. Many of the current habitats of great blue lobelia in Massachusetts are somewhat disturbed, open habitats—which are kept open either by grazing cattle or occasional mowing. The populations have been grazed and trampled, some of them heavily: monitoring of the populations in pastures with temporary protection when damage appears likely would be helpful. The disturbances of the habitat may allow establishment of aggressive exotic species, as has occurred with one population. Control of any exotics may be necessary.

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